

Amendments to the Specification

Please insert the following new paragraph on page 1, before line 3:

FIELD OF THE INVENTION

Please insert the following new paragraph on page 1, after line 5:

BACKGROUND OF THE INVENTION

Please insert the following new paragraph on page 2, after line 11:

SUMMARY OF THE INVENTION

Please insert the following new paragraph on page 4, before line 1:

DETAILED DESCRIPTION

Please replace the paragraph beginning at page 8, line 1, with the following new paragraph:

The advantages achieved by the invention consist include in particular [[in]] the fact that a multiple coating of heat transfer surfaces with nanoparticles used for the coating provides a heat exchanger which satisfies different and in some cases also divergent demands. The selected use of nanoscale particles of different materials

achieves the desired functionality of the heat transfer surfaces. With this form of surface coating it is possible, for example, to improve the resistance to corrosion or the hardness and scratch proofing, and furthermore it is possible to produce self-cleaning and antimicrobial surfaces. For both an improved resistance to corrosion and at the same time also an improved self-cleaning effect brought about by rendering the heat transfer surface as hydrophilic, at least one corrosion-resistant layer and at least one further hydrophilic layer, in particular arranged thereon, are provided. Improved use and/or performance of the heat exchanger are achieved as a result of the abovementioned improved properties.